

*John Guy*

*Feb 1899 1900*

*1899  
20*

ProQuest Number: 13906901

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 13906901

Published by ProQuest LLC (2019). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code  
Microform Edition © ProQuest LLC.

ProQuest LLC.  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 – 1346

William Williams aged 59 Bricklayer  
Admitted 22-1-99 Died 26-12-99

Parents both dead, causes unknown & patient could give no history of the other members of the family

### Previous Illness

Had "venereal disease" when about sixteen years of age & some years ago had "inflammation of the lungs". at that time he was ill for three months

### Social Habits

Patient is unmarried & admits that he has been very intemperate in fact he spent most of his wage, which was about 36/- per week, in drink & horse racing. For the past eight weeks however he has been "on tramp" and as a result has not been getting either good or sufficient food

### Present Illness

Took ill suddenly at 11 A.M. on November 19<sup>th</sup> with some dry coughing and much diarrhoea. The throat felt as if it were thickened and the appetite was lost. Next day a cough came on, with acute pain in the right side of the chest and some shivering. There was no headache or vomiting. He had some spit, yellow in colour & was very thirsty. On the 21<sup>st</sup> the patient felt much worse. The cough was more prominent, the spit more profuse & the shivering worse.

Patient attributes his illness to the fact that on the 18<sup>th</sup> that is the day before he became ill

he was rather lightly clad and the day was cold & foggy. He did not get wet at all but felt chilly most of the day.  
Condition on admission

Patient complains of pain in the right side of the chest. The breathing is accelerated about 36 per minute & is rather shallow. There is an irritating cough and a spit which is scanty, rusty & tenacious. Towards afternoon, however, on the day of admission it became much more copious, darker in colour more frothy and less tenacious. There is no headache. The appetite is gone but thirst is a marked feature. There is no appearance of herpes on the lips. The tongue has a moist thick yellow coat. There is no vomiting and the bowels are not loose. There is a slight perspiration all over the skin. The pulse is about 98 per minute, of good volume though somewhat soft. The heart sounds are normal. The temperature is  $102.8$ . There is the suggestion of a chancre on the glans penis.  
Examination of chest

Inspection gave negative results except that if anything the movement on the right side was not quite so free as on the left side. This was probably due to the pain.

Palpation revealed nothing.

Percussion showed some dullness of the right lower lobe laterally apparently over the lower border of the lung. The dullness moreover was not well marked.

Auscultation of that area showed nothing characteristic. The respiratory murmur was

to a great extent obscured by moist bronchial rales which were fairly numerous over both lungs

Nov. 23. The patient slept well last night but today he complains of pain about the right nipple & there was found there a limited area of dullness. The respiratory murmur was much weaker than in the surrounding tissue. The respiratory murmur over the whole of the right lung anteriorly is distinctly weaker than on the left side. Today the rales on the left side have disappeared to a great extent and those on the right have become coarser in character. The dullness in the right side of the chest does not seem to be altered in any respect. Patient has been drowsy today but not delirious. There has been some diarrhoea.

Nov. 24 Patient slept well last night. The bowels moved twice during the night, the motions were relaxed and light brown in colour. This morning there does not seem to be any alteration in the chest condition. The patient looks much better and the pain complained of yesterday in the right chest is absent now. The motions are still relaxed. In the evening the patient complained of the pain recurring again in the chest & also of breathlessness. Auscultation over the painful area showed, at the end of inspiration, fine dry crepitation. This was taken to indicate some extension of the inflammatory process & this was afterwards proved to be the case. There is a very slight expiratory rattle in the throat.

Nov. 25<sup>th</sup> The area of consolidation was increased very considerably. The upper lobe, the posterior part of the middle lobe and the lower lobe showing dullness throughout. Pure tubular breathing is heard over the upper lobe but over the lower lobe the breath sounds are not so well marked being hidden by coarse moist rales. The expiratory rattle is not nearly so well marked today nor is the face so dusky as it was yesterday. The spit is still purulent and becomes more copious.

Nov. 26 During last night the patient had very little sleep. His breathing was bad and he was very restless but not delirious. The bowels moved five times. This morning he looks more exhausted. Face is dusky but pulse fairly good. Oxygen was given and had some temporary success but the patient ultimately refused it. Late in the afternoon the pulse began to fail and death took place towards midnight. Consciousness was present up to the last.

#### Treatment.

This at first consisted of a saline mixture with Ipecacuanha. As the disease advanced he was put on a stimulating ammonia mixture. Inhalations of oxygen were given on the day he died. Nothing was given for the diarrhoea.

#### Post mortem Examination

Body well nourished. Dark nervous frothy fluid oozing out of the mouth.

There is a considerable layer of subcutaneous fat. There is about twelve ounces of clear serous fluid in the right pleural cavity. The right lung is adherent to the chest wall by numerous recent bands easily broken down. The lung is removed with difficulty owing to its being practically solid throughout. The three lobes are adherent to each other by recent layers of fibrin. The upper lobe is solid throughout and is greyish in colour.

The middle lobe is in a similar condition except towards its anterior border where the lung tissue was normal but very oedematous; clear frothy fluid could be pressed out in abundance. The lower lobe was solid throughout but the solid matter was softening and towards the lower and anterior margin the living tissue, which could be easily broken down, was filled with purulent looking frothy fluid which could be squeezed out.

The left lung was almost universally adherent to the chest wall by old firm adhesions and had to be partly cut out of the chest, it showed in greater part a leathery appearance like a lung long compressed by fluid, but otherwise appeared normal.

#### Heart

The right side was filled & distended by black clotted blood. Both in the auricle and the ventricle there was a firm antemortem clot. The tricuspid valve was ~~healthy~~ normal. The left heart was practically empty but in the ventricle there was an antemortem clot which

sent a pulsation into the aorta  
The aortic valve appeared & acted all right.  
The heart muscle was firm & healthy. There was  
no pericarditis.

Stomach & bowels were empty of solid matters  
but were slightly distended by gas.

There were some haemorrhagic spots on the mucous  
surface of the stomach.

The liver was very brittle but was normal in  
size. It showed much fatty degeneration.

The kidneys were normal in size but somewhat  
congested and the epithelium was granular.

Spleen The substance was semi-plush and of a dark  
brownish red colour. The organ was normal in size.

Having now described a case in detail I shall  
proceed to deal with the various points which  
are prominent in it.

The cases I have read for the study of this disease  
have all been found in one of the largest poor-law  
infirmaries and the patients have been drawn  
from a selected class, namely paupers and they  
bring out a few facts of interest.

In the first place pneumonia is an extremely  
common cause of death among paupers, as during  
the past seventeen years there have been, in this  
infirmary, a total of 3,469 deaths of which no less  
than 469 or 91.6 per thousand are due to pneumonia.  
Not only does the pneumonia death rate stand high  
in relation to the death rate from all causes but  
the proportion of deaths to recoveries is also high.  
In 142 cases that I examined no less than fifty seven  
deaths took place giving a death rate of 40 per hundred.



The death-rate in voluntary hospitals from pneumonia is usually given as from 20% — 30%

This increased mortality among paupers is due chiefly to three causes

Firstly, in their infancy most of the patients are brought up in poverty and a good foundation cannot be laid so as to withstand any attack of acute illness at a later period of life

Secondly, the intemperance of the average pauper is appalling; out of 142 cases thirty state that they are temperate in their habits, six gave no information as to their drinking capabilities, and the remainder 106 in number are classed as intemperate. Some of them when in regular work would spend at least ten shillings per week on drink. The usual rule is to spend the pauper's money on drink

The third cause is that a great number of these cases are single men who reside in private lodgings or common lodging houses, and their food is often bad in quality & insufficiently cooked so that from these three causes working together pneumonia among paupers is a very fatal disease

The months from December to June inclusive are those in which the greatest number of deaths take place and of those months March is the heaviest as will be seen from the following table which is an analysis of the deaths from pneumonia in this hospital for the past eighteen years.

	Jan	Feb.	march	April	May	June	July	Aug.	Sept	October	Nov.	Dec
1882	1	1	3	4	2	0	1	1	0	2	1	3
" 83	2	0	1	0	0	0	1	3	1	2	0	1
" 84	3	3	2	1	3	4	2	4	1	0	0	1
" 85	1	1	2	0	1	3	1	1	1	2	2	5
" 86	0	1	4	2	3	1	0	2	0	1	0	2
" 87	1	2	3	1	1	2	2	1	3	1	2	0
" 88	2	6	2	7	7	4	0	1	1	4	0	4
" 89	3	0	2	8	7	4	1	0	0	2	4	"
" 90	7	9	24	7	3	1	2	3	2	1	3	4
" 91	3	4	3	1	3	2	1	1	0	0	1	1
" 92	2	2	3	5	0	0	1	1	2	1	0	3
" 93	2	0	2	4	3	3	0	0	2	0	1	3
" 94	4	1	2	2	4	0	1	0	1	0	0	1
" 95	3	1	3	1	3	1	3	0	2	3	1	2
" 96	2	1	2	0	2	4	2	0	2	1	3	0
" 97	2	2	3	5	6	3	1	2	3	4	0	0
" 98	1	4	1	6	3	3	3	1	2	0	1	1
" 99	1	6	5	3	4	1	1	3	4	1	1	2
<u>Total</u>	42	43	71	57	61	38	23	24	27	25	22	44

The diminished mortality in the months of July & November inclusive being very marked being practically about one half of the number of deaths in the other months.

August is the month with the fewest deaths these figures correspond with those given by the Registrar General as to the months of maximum and minimum death rate from pneumonia.

During two complete years we have had 114 cases and it is seen from them that January, March &

April are the months in which most of the cases occur. and that in July August and September very few cases occur.

January	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	9	17	17	12	11	3	2	3	12	9	5
											= 114

The cases coming under my notice varied considerably in age ranging from 3 to 73 years. The age distribution of 142 cases is as follows

Age periods	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65-75	75-85
Cases	3	3	14	33	45	25	14	5	0

By far the greater number of cases were men in fact only five females came under my notice. I do not however, for a moment, put this forward as an example of the frequency of the disease in the sexes as the majority of acute cases of illness amongst the patients admitted here are men. There is no doubt however that pneumonia is much more common, in the lower classes, amongst men than women owing chiefly to the different occupations. The men being much exposed to weather and other depressing circumstances whilst the women are for the most part employed in the factories.

Cause.

In the great majority of cases the patients attribute their illness to exposure to inclement weather or to getting wet. In only one case did I meet with, so far as I could judge, a case of direct infection. This was the case of C. R. 24

who had been nursing and sitting up at night with his brother who was ill with pneumonia and who died on 22-5-99.

Five days later on the 27<sup>th</sup> C.R. had rigors and was compelled to go to bed on account of feeling so very unwell and on being brought here four days later showed a fully developed apical pneumonia in the right lung.

In no case could I get a history of injury as a cause, nor inhalation of any irritating vapours but in one case Pat. G. 54 the patient attributed his illness to the fact that just previously to turning ill he had been working over a newly opened sewer and he thought that the sewer gas had had something to do with it. At the same time he admitted that he had been exposed to wet weather while working at the sewer. It is probable here that both circumstances had to do with the causation of the disease.

In some of the cases no cause could be thought of.

The relation of pneumonia to meteorological events is very close indeed & is well shown in some of the cases. Whenever wet, cold and changeable weather prevailed then it was followed by a series of cases of the disease. Cold weather by itself produced very little effect but when the diurnal range of temperature was great as in spring then we had the greatest number of cases.

I paid particular attention to this point with those cases which occurred in the summer months and I noticed that those days with a

considerable amount of sunshine, and <sup>which</sup> therefore were warm, and some of them were particularly so, but which were followed by an east or north east wind, these days then were followed by a few odd cases of the disease.

I noticed this markedly in two cases where for some days we had been having a south west wind and then suddenly it veered round to the north east and a few days later these cases were admitted stating the beginning of their illness & the date at which the north east wind came.

These cases show that meteorological events if not the sole cause of the disease at all events play an important part in the causation of it at least in those cases which are not directly due to infection. On the other hand the well marked course of the disease and its usually well defined boundaries lead me to the conclusion that in addition to exposure to cold & wet a specific micro-organism is required for the production of the disease and such a micro-organism can be found in the sputa of practically every case in the form of the *Diplococcus Pneumoniae*.

### Initial Symptoms and Signs

The usual history was that the illness commenced with extreme suddenness. The patient might be walking about or might have been working all day and on the way home at night he shivered and became sick & could not take his food or he may have gone to bed all right and awoke in the middle of the night with rigors & would be unable to go

I work next day, & recently the onset was accompanied by pain more or less severe in the chest and an irritating troublesome cough. The temperature was usually high but as I am dealing with this point by itself I shall leave it at the present.

The spit might come on at the very outset and consist of clear tenacious mucus singly or it might be streaked with blood.

In my experience however the spit made its appearance more often on the second or third day of the disease. Sometimes there was at this stage no spit at all.

The pain referred to above was sometimes simply confined to that part of the chest over the area of lung affected but often it would be reflected all round the side of the chest and sometimes even it was complained of in the abdomen in the region of the epigastrium.

The onset in other cases was not nearly so well marked and considerable difficulty was found in fixing the actual day and in some cases it was altogether impossible to give any precise date. For instance J. B. aged 49 a heavy drinker all his life was admitted on 16-9-99 complaining of pain in the lower part of the left chest and stating that he had not been well for the past two weeks. He had had rigors on three separate occasions namely on the 6<sup>th</sup> - 8<sup>th</sup> and the 9<sup>th</sup> and then after an interval on the 15<sup>th</sup> they returned accompanied by sweating. Next morning the 16<sup>th</sup>.

he was unable to take breakfast and felt so unwell that he had to return to bed. On his admission here the same day, he complained of pain in the left side and over the lower part of that lung there was marked dullness. The case terminated fatally on 20.9.99.

Headache was another prominent feature in some of the cases at the onset but usually it passed off in about forty eight hours but occasionally it was very persistent.

Tomiting was also common. It usually occurred on the first day and was absent afterwards. In any case when it occurred the act of vomiting usually took place once or twice and just about the same time as the rigor.

I only observed delirium, among the initial manifestations, once and in this case it came on the first day & continued right through until the fatal termination on the seventh day.

In the few cases which I was fortunate enough to get from the very beginning the first noticeable alteration of the respiratory mucous was that it seemed to be harsher and more like precise breathing and then fine crepitation came on. The blood showed some considerable increase in the number of leucocytes. The respiration numbered about 30 per minute and the pulse rate 80.

The tongue was moist and covered by a thick creamy fur. The movement of the chest wall might be less extensive than on the healthy side particularly if pain were present. The bowels as a rule were inclined to be constipated. This stage passed on quickly to the second stage namely that of Consolidation and during this period in a well marked case the usual

appearance revealed: The face would be flushed  
as a whole or it might be that both cheeks only  
were affected or the flushing may be confined to the cheek  
corresponding to the lung affected. The breathing is  
shallow, hurried and gasping. The tongue becomes dry  
and brown and possibly cracked. The skin may be  
moist but more often it has a dry burning feel.  
The bowels were usually constipated although in some of  
the cases diarrhoea was marked as it was in the case  
given in full length at the beginning. In cases where  
a large area of lung was involved the eyebrows would  
be raised and the alae of the nose dilated at each  
inspiration. Ultimately I began to dread the appearance  
of these two signs as the cases which showed  
them almost invariably died. The urine in this  
stage is usually diminished in quantity and loaded  
with mucus & often showed a quantity of albumen.  
The chlorides I did not estimate. Delirium at this  
stage was practically present in every case. Sometimes  
it would be slight and quiet in character and  
consist mostly of wandering in the speech. At other  
times it would be more pronounced and the patient  
would be always wanting to get up and go home.  
Other cases met still more violent and had to  
be kept in bed practically by force. One patient who  
was practically moribund, first had been previously  
to this rather troublesome, and was thought to be  
incapable of doing any injury to himself in the temporary  
absence of the nurse got out of bed took a short  
run and a header through the window which  
fortunately was only a few feet above the ground  
but he was picked up, placed outside.  
Examination of the lung at this stage revealed usually  
the classical signs but not always as instead of



Pneumonia



crack 6/24/42 12:12 PM Pneumonia



The vocal resonance being increased in some cases it was diminished and the respiring murmur could only be heard faintly. This was particularly so if some pleuritic fluid intervened between the lung & the chest wall. The chest wall as a rule was bulged out somewhat. The percussion note over the left lung unaffected I noticed occasionally & the sediment appearance in quality. During the height of the fever the respirations are much more rapid than in the re-consolidation stage. In one case, which however recovered, they reached 64 per minute while the pulse in the same case was 100. As a rule the respirations ranged from about 38 to 48.

The pulse was shown by the sphygmograph & the stethoscope and in some instances markedly so. (See opposite page) The rate varied considerably ranging from normal up to 150 a minute. When the case was terminating fatally the pulse instead of being full & strong, became smaller in volume less regular and ultimately flickering in character so that it was impossible to count it. The rate seemed to depend upon several factors, I as to the condition of the heart itself, as to the efficiency or otherwise of the valves; as to the existence of any pericardiac adhesions; as to the height of the temperature. As an instance of the first case when rapidity of the pulse was due to a diseased heart let me instance the case of J. J. who had been an inmate of the infirmary for some months owing to an attack of hemiplegia and in whom both the mitral and aortic valves were defective from the very beginning of his illness from pneumonia the pulse ran along at 140 per minute until death took place. There is no definite relation between the pulse rate and the height of the temperature as in

cases where the temperature was 103 the pulse was running at from 80 to 100 per minute. In another case where the temperature ran along the normal line the pulse ranged at from 100 - 128. This was in the case of a man aged 73. As a general rule however when the temperature ran up the pulse rate increased and I have noticed several instances where the rise in temperature was announced by an increased pulse rate. The pulse respiration ratio was usually about 1 - 2.4. In one case it came as low as 1 - 1.4.

In the second stage of the disease in some of the cases sleeplessness was a prominent feature.

Distension of the bowel with flatulency was observed occasionally and in one case it was very extreme so much so as to greatly interfere with respiration and I have no doubt contributed greatly to the fatal termination.

The spit during this stage showed the usual appearances. When the crisis arrived a marked difference was at once noticed in the patient's condition that many have been delirious and sleepless now fell into a quiet sleep.

Sweating was common at the time of the crisis or a few hours previous to it. I did not observe any critical diarrhoea or any decided increase in the quantity of urine excreted. In the case quoted at full length at the beginning there was unfortunately no opportunity for watching the crisis.

The pulse as a rule underwent a rapid change. It slowed down at about as rapid a rate as the temperature fell. In the case of Ed. 2 40 the temperature fell in about 12 hours or so from

107° & 97.5 and during the same time the pulse rate fell from 104 & 70 per minute.

The respiration rate does not however show such a marked fall. In the case of Ed. 2. at the time of the crisis the respiration rate only fell during twelve hours from 40 & 36 per minute and it took about ten days before it became normal.

In another case it was 16 days after the temperature fell before the respiration rate became normal. About two weeks was a very common period of time & delay before the respirations became normal. In only very few cases indeed did they become normal under one week. This clearly indicates that the regularity of breathing does not depend so much upon the temperature as upon the extent of lung involved and improvement in the condition of the lung itself must precede improvement in respiration. In any given case where the rapidity of the respirations underwent a progressive change that is where the rate became quicker the case usually terminated fatally.

The appetite after the crisis usually returned quickly and in the young & strong convalescence was rapid but in the majority of the cases convalescence was slow and protracted.

### Complications

One of the most important that took place was premature labour. This was in the case of Kate O. 22 who was six months pregnant and who was confined on the fourth day of the illness <sup>caused by</sup> pneumonia. The case ended fatally on the fourteenth day.

In no case did I meet with an empyema following pneumonia. In another case where the lung did not recover quite thoroughly the patient returned in about six months with well marked atrophic signs in the area where the inflammatory mischief had been. In the case of a child the pneumonia was followed by Whooping cough. The course of which was uneventful. Meningitis occurred in another case which apart from that had been favourable, but which ended fatally. During life I never detected any evidence of pericarditis in any case. In one case the pneumonia subsided on what appeared to be an attack of acute rheumatism. The patient M.D. 29 came in complaining of severe pain in several of the joints of a few days duration. There was also a slight cough. Typhypyrexia was a marked feature the temperature reaching on two occasions  $106^{\circ}$ . About two days after admission some dullness was noticed in the middle part of the lower lobe of each lung. The case terminated fatally in about 36 hours afterwards and the lungs on examination, were seen to be in a state of red hepatization in the parts corresponding with the dullness.

I did not meet with any case where gangrene of the lung supervened.

Cardiac murmurs I noticed fairly often during the height of the disease.

Treatment

This was my simple and as a rule was somewhat as follows. If pain were present poultices were applied until relief was obtained. A simple pectoral mixture was ordered. Whenever the pulse

begin I show any signs of weakness or stimulating ammonia mistake was substituted with or without digitalis or nuxvomica as the case required. I have noted most beneficial results from the administration of these two drugs. Alcohol was never administered as I believe it to be the great cause of pauperism and moreover any degree of stimulation required could be produced by the ammonia compounds.

### Post mortem notes.

I only met with one case of double pneumonia and that was in the case of M.D. already reported to. The affected areas varied considerably in size from the total consolidation of one entire lung down to a tiny patch about two inches in diameter. In this latter case the consolidated area was situated on the upper margin of the right lower lobe and was in the case of an old patient aged 68. Pleurisy was present in every case and in one or two the layers of fibrin were excessively thick. Pleural effusion was marked in some cases eight ounces of clear serous fluid being found in one case. Another showed much more but unfortunately it was not measured. It was remarkable that I did not meet with a case in which the non infected lung could be passed off as healthy. Emphysema was an extremely common disease affecting it in other cases it would have no pleural cavity and would require to be

cast out of the chest. In addition to that it was usually oedematous and some cases were markedly so. In one instance I have made the note that the parts of the lungs free from pneumonic consolidation resembled wet sponges so much fluid could be pressed out of them.

These cases make one wonder if there is no possible means of draining away the fluid which is simply drowning the patient.

The pericardium showed slight pericarditis in two cases.

The right heart as a rule was distended and filled with dark clotted blood.

The left heart was usually empty.

In every case there were white antemortem clots, very firm in character, adherent to the heart walls or entangled in the columnar cernae. Often the auricular appendages would be filled with a clot of this character.

The liver invariably showed fatty degeneration. The kidneys then were much congested and showed granular degeneration of the epithelium. In one case there were two recent haemorrhagic infarctions.

The bowel as a rule presented nothing worthy of notice. In two cases flatulent distension was present to a great degree.

The mucous coat of the stomach in several cases showed haemorrhagic points.

The spleen was usually normal in size but the pulp was much softer in the case given at the beginning it was semiplenic.

I repeatedly examined the specimen bacteriologically and invariably found some diplococci. In one case however I found a small rod shaped bacillus. I made the following note concerning it. Gelatine streak or plate cultivations show pure cultures of a minute rod shaped bacillus much smaller than the typhoid bacillus. Colonies are round & transparent, raised above the surface of the gelatine and appear to be granular when examined by the low power of the microscope. The organisms stain well by Fuchsin but not by Gram's method. In potato they produced a yellowish growth. The hanging drop showed some of the bacilli to be motile & others in a resting condition. In short it gave all the characteristics which Klein describes in his description of the bacillus which he discovered in the histonice Middleborough epidemic of pneumonia and to which he attributed the disease.

### Temperature

This presents so many points of interest that I have left it to be specially dealt with by itself. In looking at a chart of a case of Pneumonia there is nothing absolutely pathognomonic about it as taking even a typical one where a well marked crisis occurs after several days of sharp fever such a chart might only represent a case of erysipelas. During the course of a case of pneumonia the temperature gives a fairly reliable guide as to the progress and as to the superintention of complications and as to the certainty of recovery. In other diseases such as measles or whooping cough when pneumonia is set to



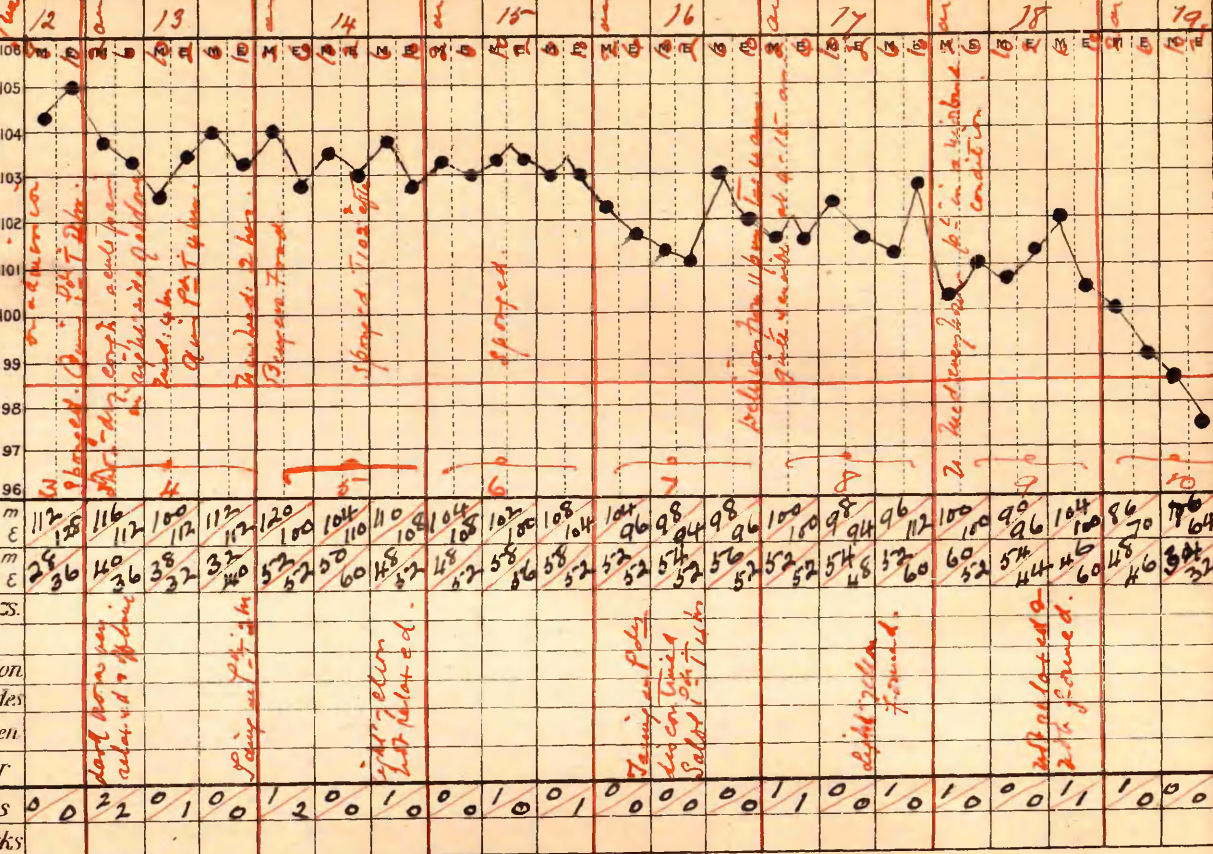
Clinical Chart of the case of

Richard Robson. 19.

NOT

DATE

TEMPERATURE FAHRENHEIT'S SCALE



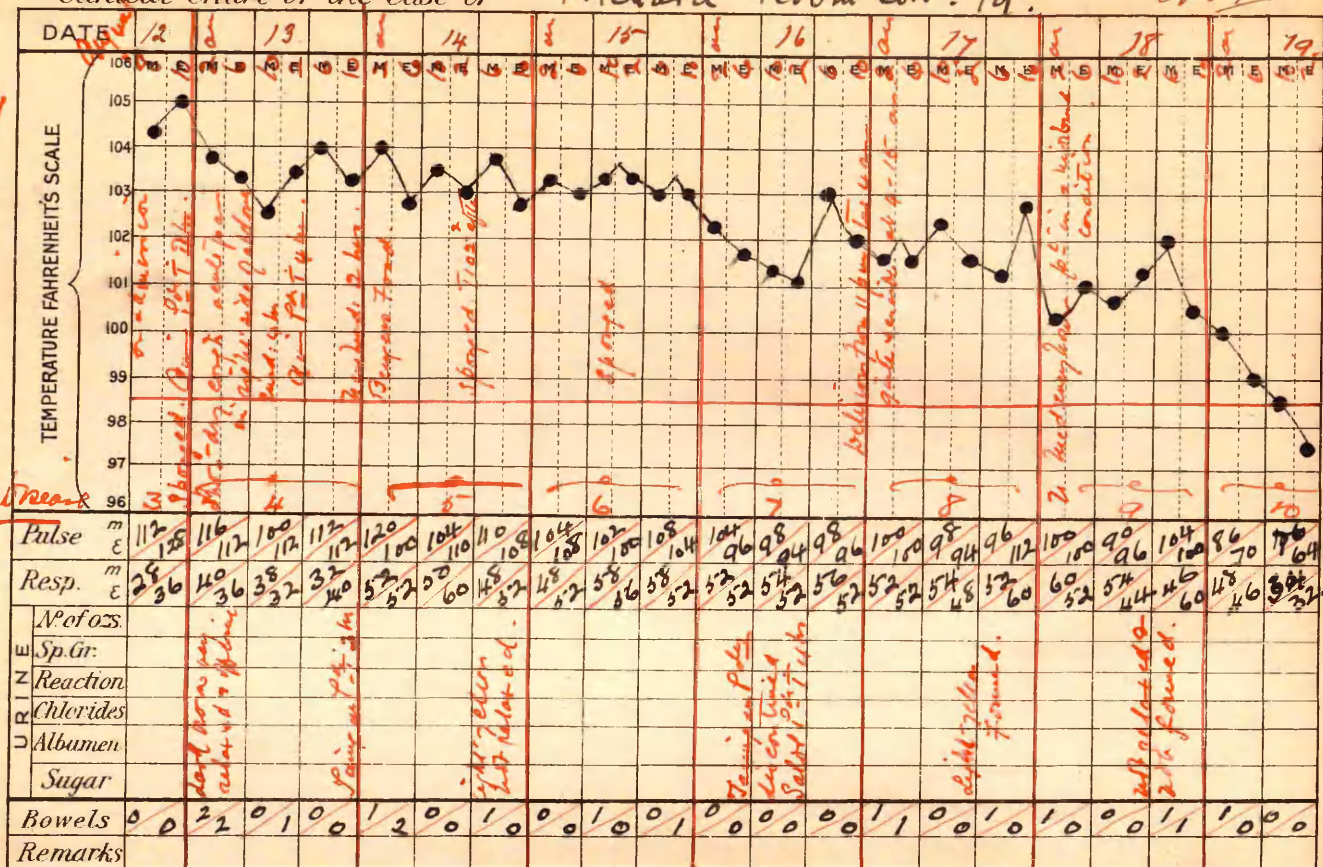
R. RAUSCHKE, LATE MAYER, MELTZER & CO. SURGICAL INSTRUMENT MAKER.  
46, WOODHOUSE LANE, LEEDS.

Telephone 889.

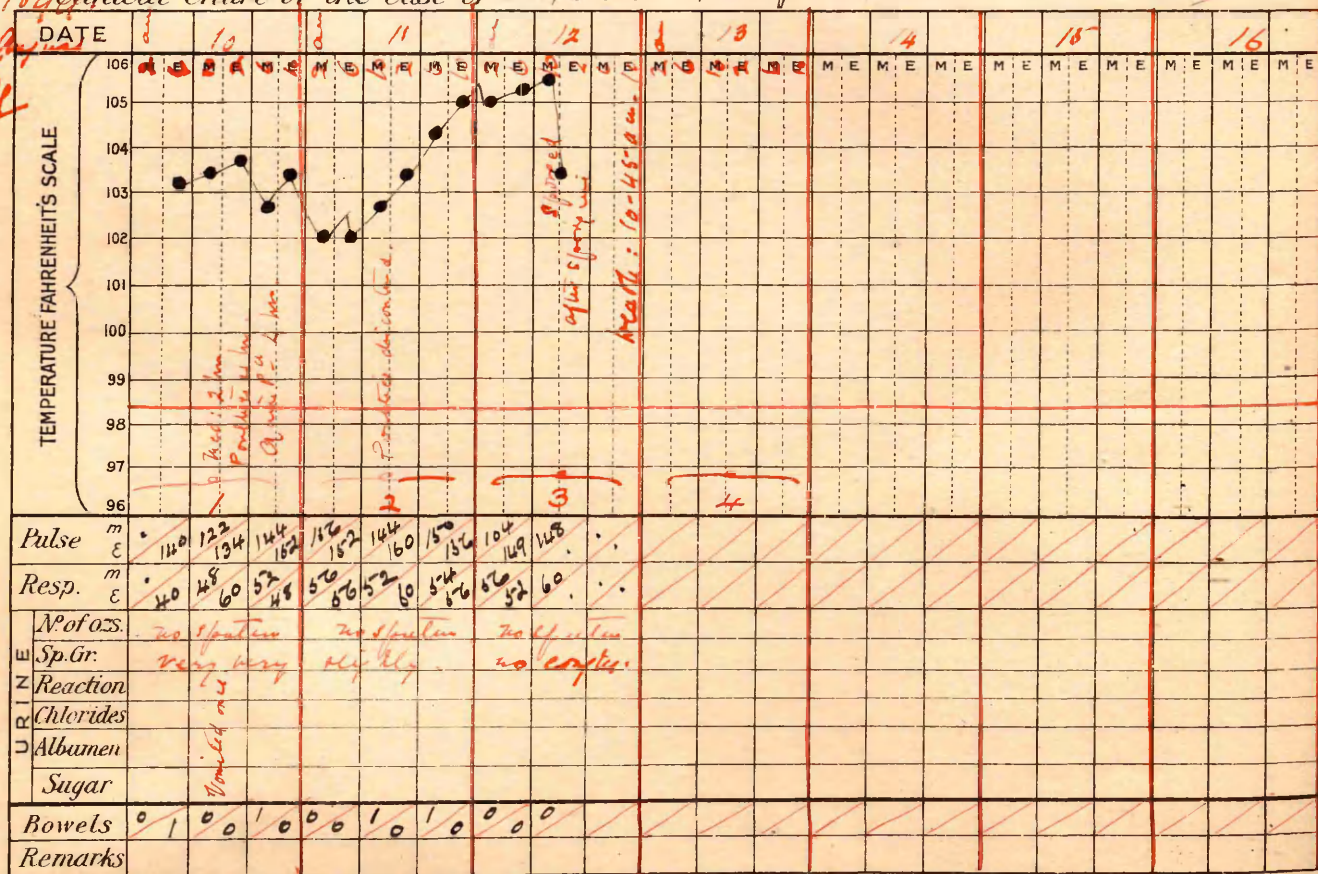
Temperature continued normal.



# Clinical Chart of the case of Richard Robinson. 19. NOT



# 189 Clinical Chart of the case of Thomas Thompson. 38 NOT



superficial as a complication the temperature is of the greatest importance as indicating by an abrupt elevation the onset of the pneumonia. I shall now deal with a fairly typical case Richard R. 19<sup>yr</sup> admitted on 12.8.99 complaining of severe pain in right chest and some cough. He had become ill two days previously.

On admission his temperature was about  $103^{\circ}$  and for the next three days it ranged between  $103^{\circ}$  and  $104^{\circ}$ . On the 16<sup>th</sup> that is seven days after he became ill the chart began to be more irregular, the temperature began to fall somewhat. The next two days showed still some irregularity but on the evening of the tenth day of the disease the temperature fell down, twelve hours from  $102^{\circ}$  to  $98^{\circ}$  and continued normal afterwards.

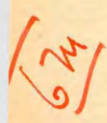
In this case I had not the opportunity of studying the beginning temperature as he was not admitted until the second day of disease so I must refer to others for that point. F. J. aged 38, Chart No 2) who had been in the hospital for some time owing to an old attack of hemiplegia, on the morning of August 9<sup>th</sup> he was in his usual health, in fact felt well all day and had a normal temperature. On the morning of the 10<sup>th</sup> he was feeling ill and the temperature was found to be  $103^{\circ}$ . This case ran through the usual course & ended fatally. Again Pat. M. 56 (Chart No. 3) admitted on the first day of disease and the temperature was found on his admission at 9 a.m. to be  $101^{\circ}$  and at two p.m. it had run up to  $103^{\circ}$ . This case had been



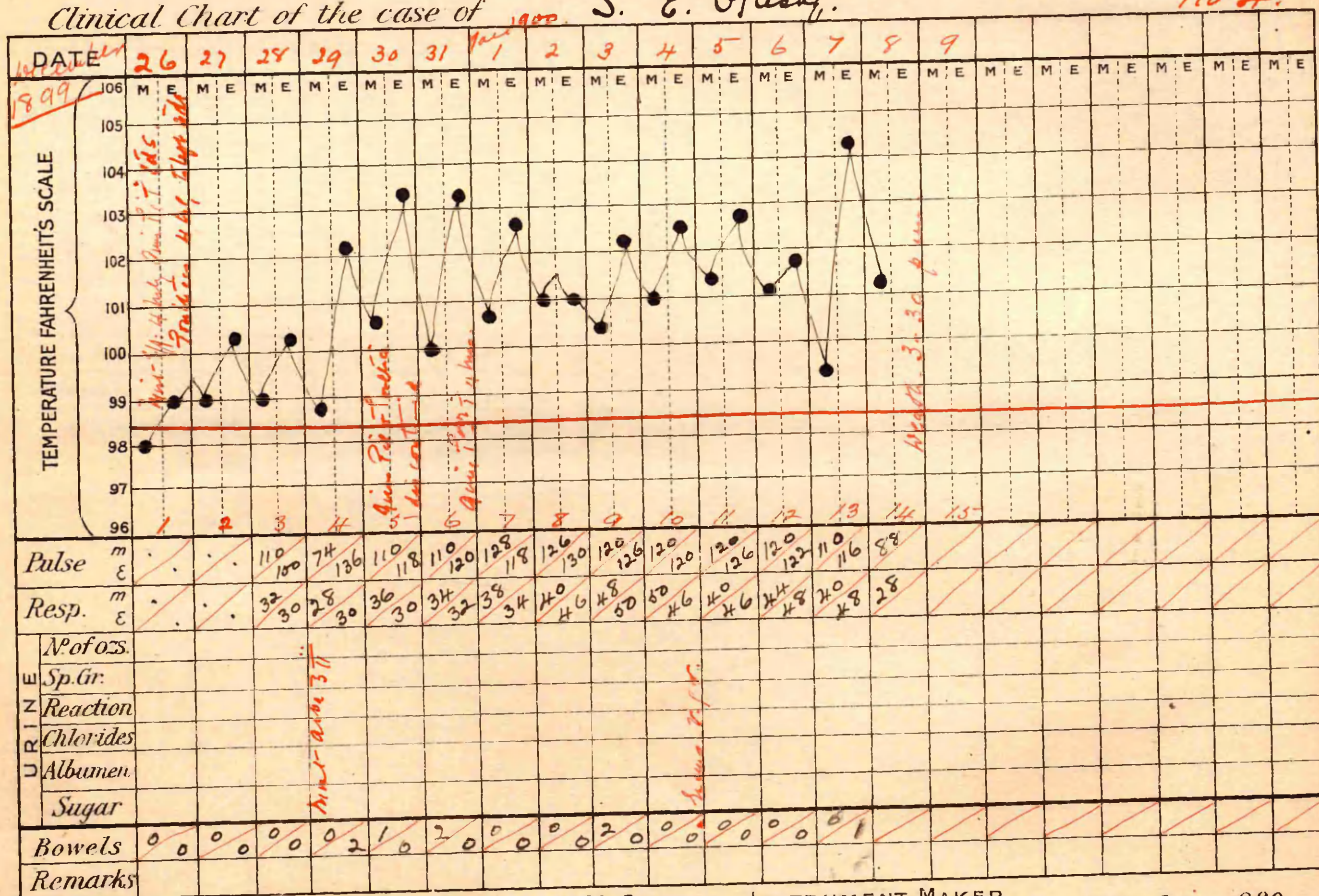




cvo 111



No 4.



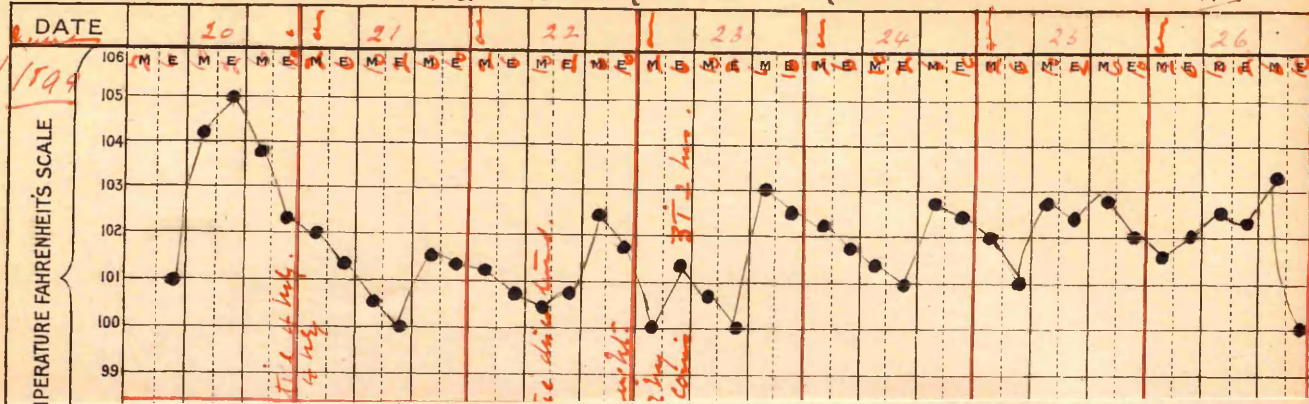
Remarks	R.RAUSCHKE, LATE MAYER, MELTZER & CO SURGICAL INSTRUMENT MAKER. 46, WOODHOUSE LANE, LEEDS.
---------	---

Telephone 889.



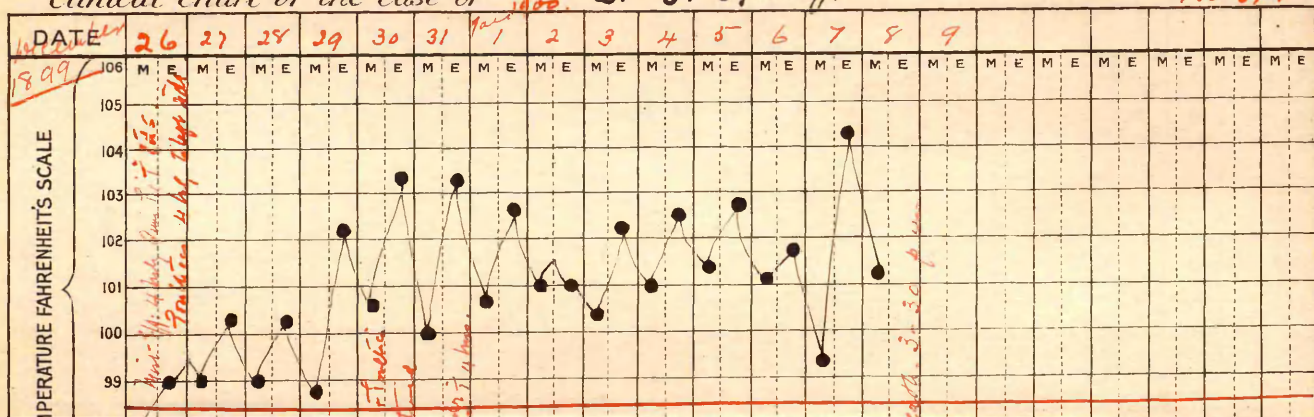
# Clinical Chart of the case of Patrick Mearnell 56.

060 111

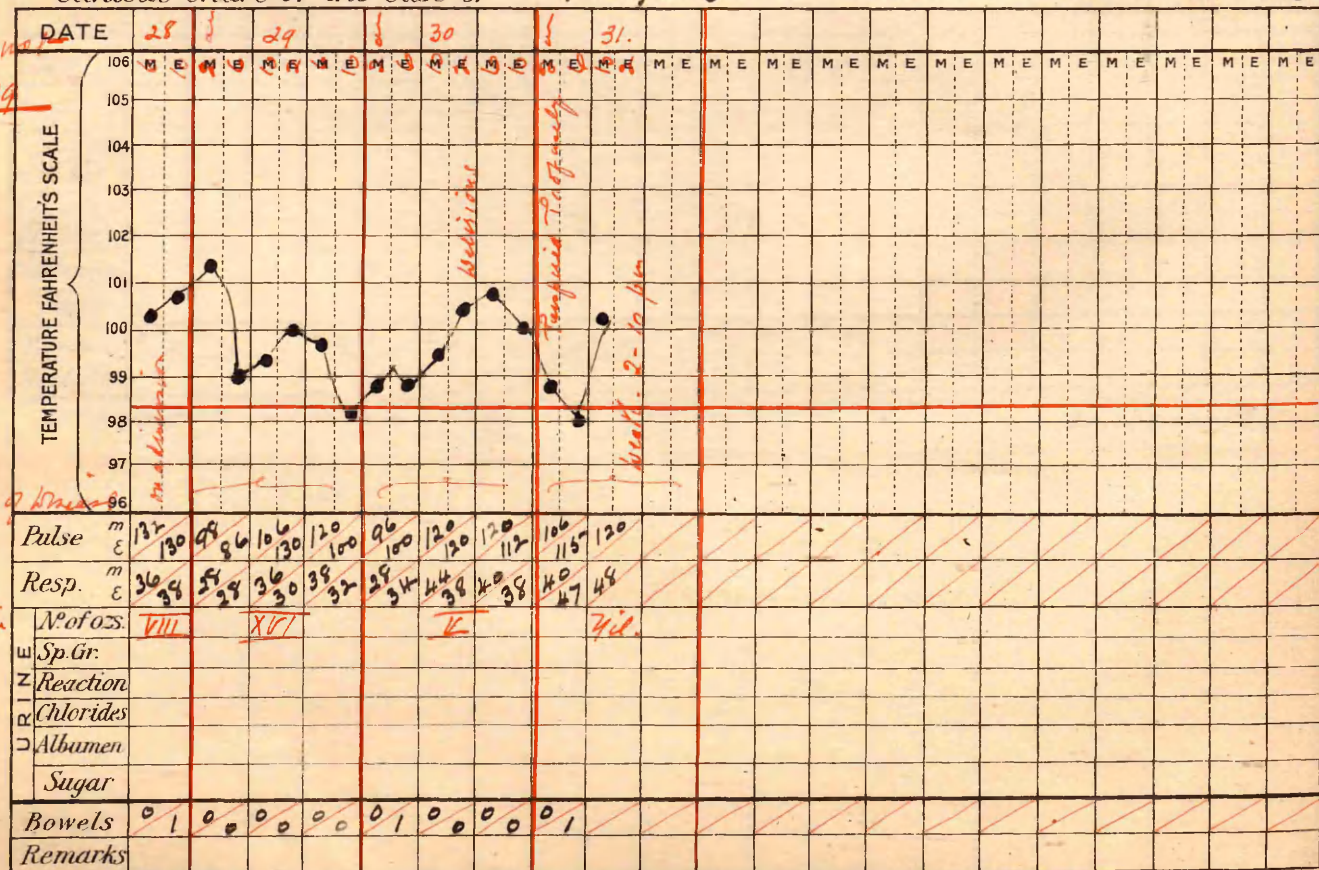


# Clinical Chart of the case of S. E. Glesby.

No 4.



# Clinical Chart of the case of George Jones 61. Pneumonia No 5-



in good health the previous day and had had rigors during the early morning on the day of admission. These cases represent a numerous class of cases where there is a rigor & start with, and the temperature runs up to a considerable height at once and then maintains its height. In chart No 2 there is an example of a rapid rise into the region of hyperpyrexia and then just as rapid a fall down to medium fever temperature and the disease runs on with fever at that level.

There is however another class of cases where the temperature does not reach its maximum for three or four days and then it is similar to the first class. This is seen from chart No 4.

There was still another variation that I noticed and chiefly in the case of the aged and is some heavy drinkers and which is illustrated in chart No 5 where the temperature never reaches such height as in the first class but only reaches a moderate height and soon falls into slightly febrile regions. The course of the chart exhibits numerous variations.

One type illustrated by chart No 6 runs along at a considerable height and shows only very little diurnal variation.

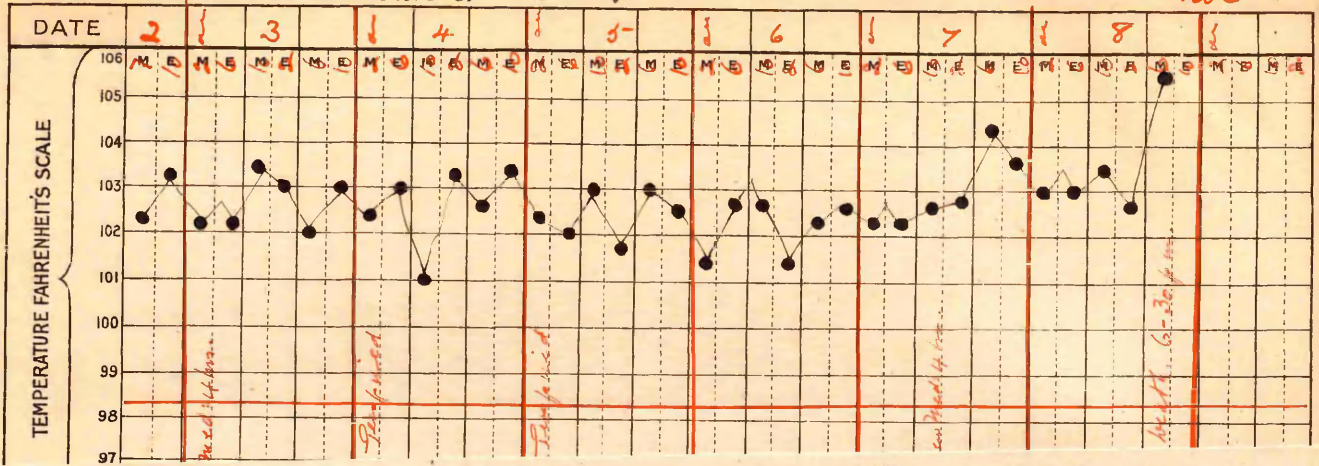
Another type noted shows a remitting form of fever and is illustrated by chart No 7 where in the course of 24 hours the temperature drops from  $104^{\circ}$  to normal and within other twenty four hours rises to  $104^{\circ}$  and again drops to normal, rises again to  $105^{\circ}$  and at this point sponging was resorted to so



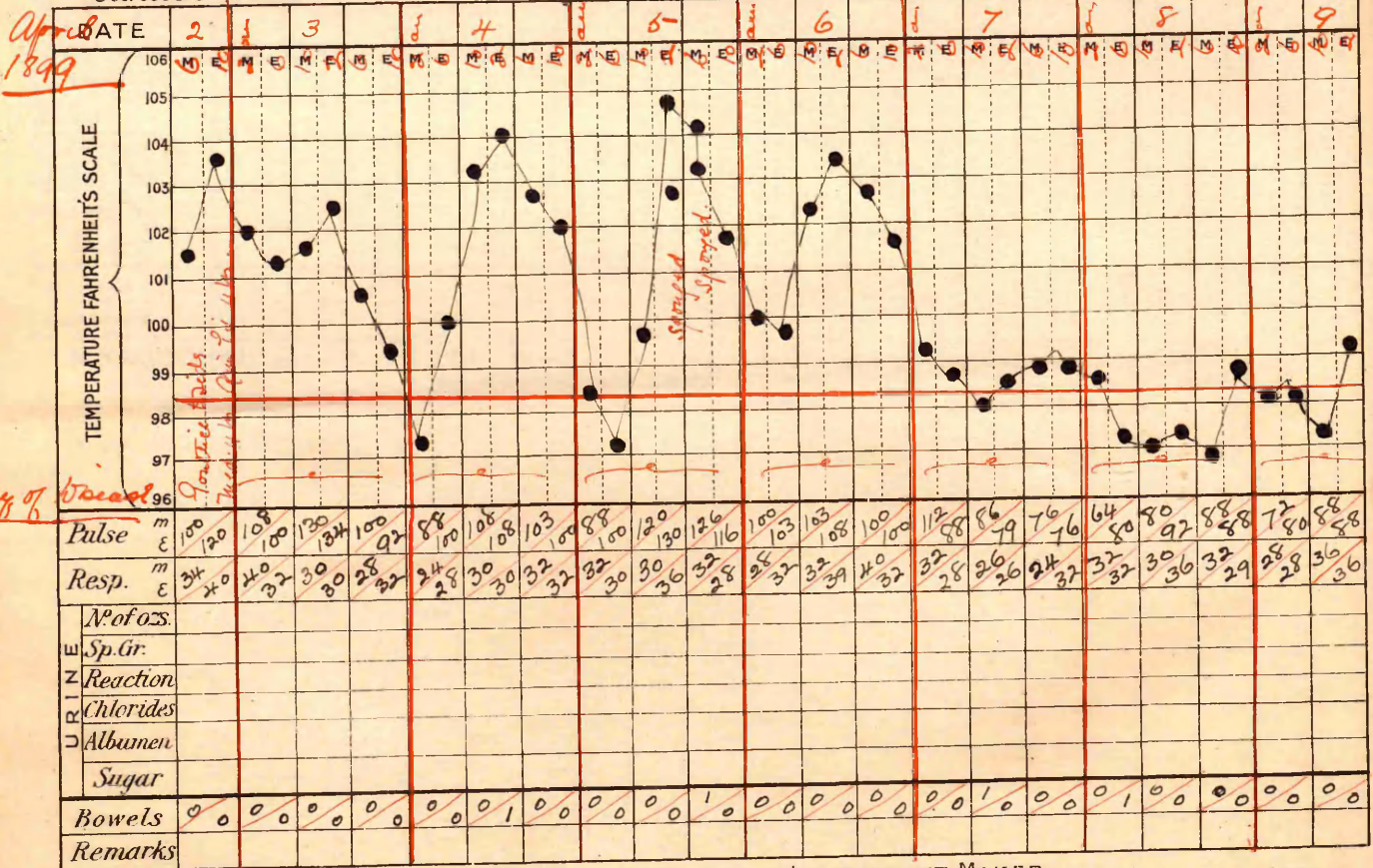




Clinical Chart of the case of *Joseph Gibson. 45. Pneumonia* No 6



Clinical Chart of the case of *J. Moore. 29. Pneumonia* No 7.

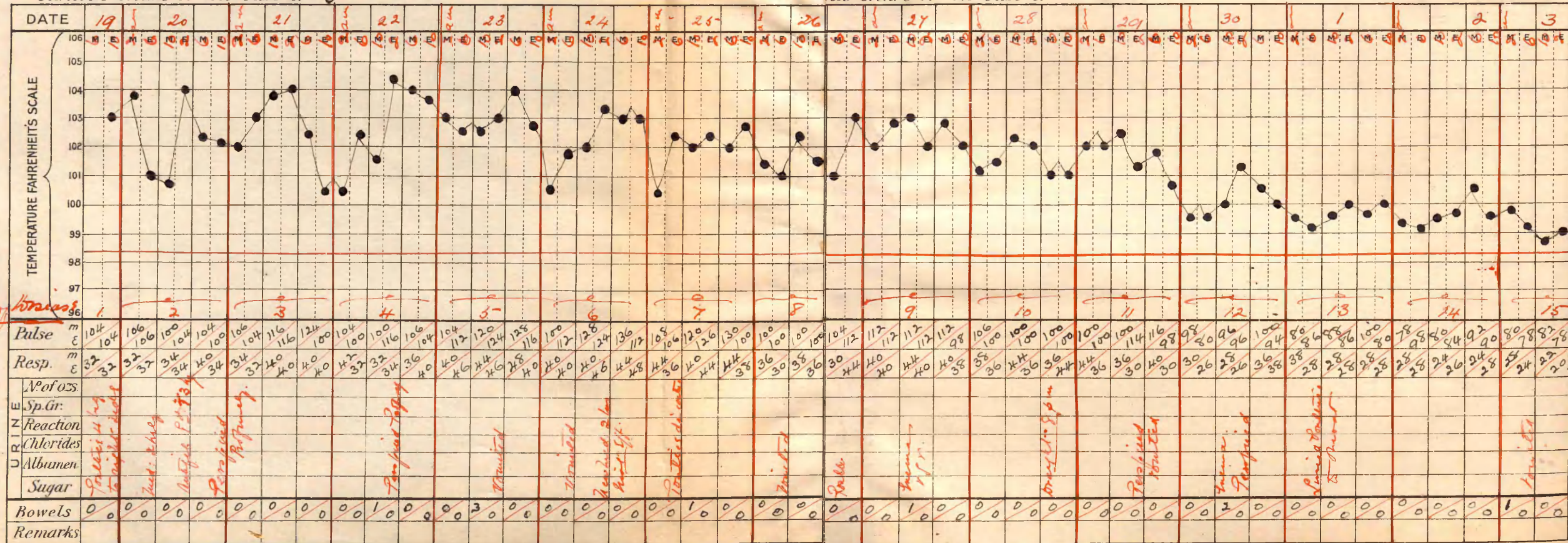


R. RAUSCHKE, LATE MAYER, MELTZER & CO. SURGICAL INSTRUMENT MAKER.  
46, WOODHOUSE LANE, LEEDS.

Telephone 889.



# Clinical Chart of the case of *Jansen Bonland. 42 Tremaine No 8.* al Chart of the case of



Temperatures remained normal

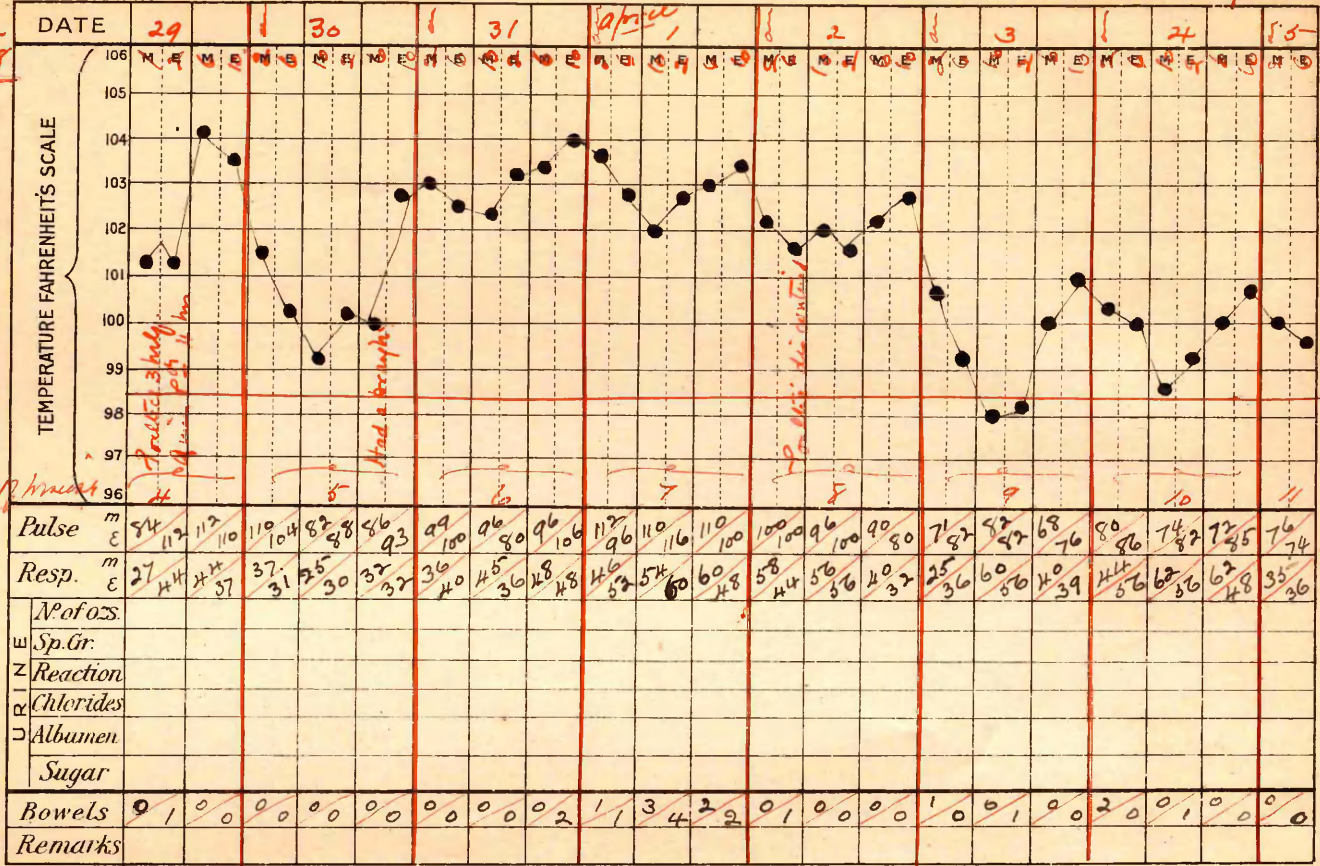
The next fall is not quite so reliable but it came down to 100°. During the next twenty four hours it rose again to 103.2 and then fell to the normal and continued so until recovery was complete. There was no history of malaria in this case.

Another type observed was when the temperature does not come down to normal but in every twenty four hours it runs over a considerable range. This is well illustrated by Chart No. 8 where a very irregular appearance is presented. I have observed this appearance in at least three cases now and in each individual case there was always a strong suspicion that the pneumococci had been implanted in a tubercular lung as the lungs took some considerable time to clear up and even then were not quite satisfactory but the temperature came to normal and presented no elevation for some lengthened period after the illness. The case from which Chart No. 8 was taken was ultimately readmitted with well marked phthisical symptoms. Another peculiarity noted during the course of the disease was that sharp falls (pseudorelapses) would occasionally take place and the crisis was thought to have come when just as suddenly the temperature would rise again and continue its former course for some time longer, although in some cases it did not reach its former height. This is well shown in Chart No. 9 where between the fourth and fifth days of disease the temperature fell



# Clinical Chart of the case of Charles Curtis 44. Pneumonia No 9.

March-  
1898



R. RAUSCHKE, LATE MAYER, MELTZER & CO. SURGICAL INSTRUMENT MAKER.  
46, WOODHOUSE LANE, LEEDS. Telephone 889.

Temperature continued 2022





from  $104^{\circ}$  &  $99$  but it soon rose again and in the evening reached  $103^{\circ}$  and continued so for other three days when the true crisis came.

I did not notice that these sharp falls, in any way, interfered with the usual course of the disease nor could I make out any cause for them, apparently they occurred spontaneously.

I now come to deal with the termination of the fever. This as a rule came on from the fifth & the seventh day of disease but was often prolonged to the tenth and in Chart No 8 it was prolonged to the fifteenth day.

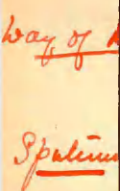
The earliest day at which I noticed the temperature falling to normal was the second this is shown in Chart No 10.

The mode of termination was, as a rule, for a crisis, more or less well marked. Chart No 1 gives a fair example of a crisis when the temperature dropped from  $102^{\circ}$  &  $97.5$ . I did not meet with a case which dropped from any higher elevation to normal. Chart No 8 furnishes a good example of a case ending by a lysis in contrast to the usual termination.

The crisis sometimes was complete within twelve hours but more often it took from twenty four & forty eight hours and sometimes even longer. When the fall was rapid I have noted the temperature getting as low as  $96^{\circ}$  but I never saw any ill effects from this, as the temperature soon rose again. On the other hand instead of having a favourable termination the disease often ended fatally and I noted occasionally



Death. 12-50 a.m. September 5<sup>th</sup> 1899



*Telephone 889.*







The exact reverse to the crisis. Instead of the temperature coming down, just before death it would mount as just as rapidly, or more so, as it would fall in the most distinct crisis. In Chart No 11 on a day preceding death the temperature in the morning came down to  $99^{\circ}$  and the crisis was thought to have come but within eight hours it had risen again to  $103.4$  and in other eight hours it reached  $105$ . At this point the patient was shocked and the temperature fell almost directly to  $99^{\circ}$  but in two hours after it had reached  $103^{\circ}$  & the patient succumbed.

Again in Chart No 2 a fairly rapid rise is noted just before death.

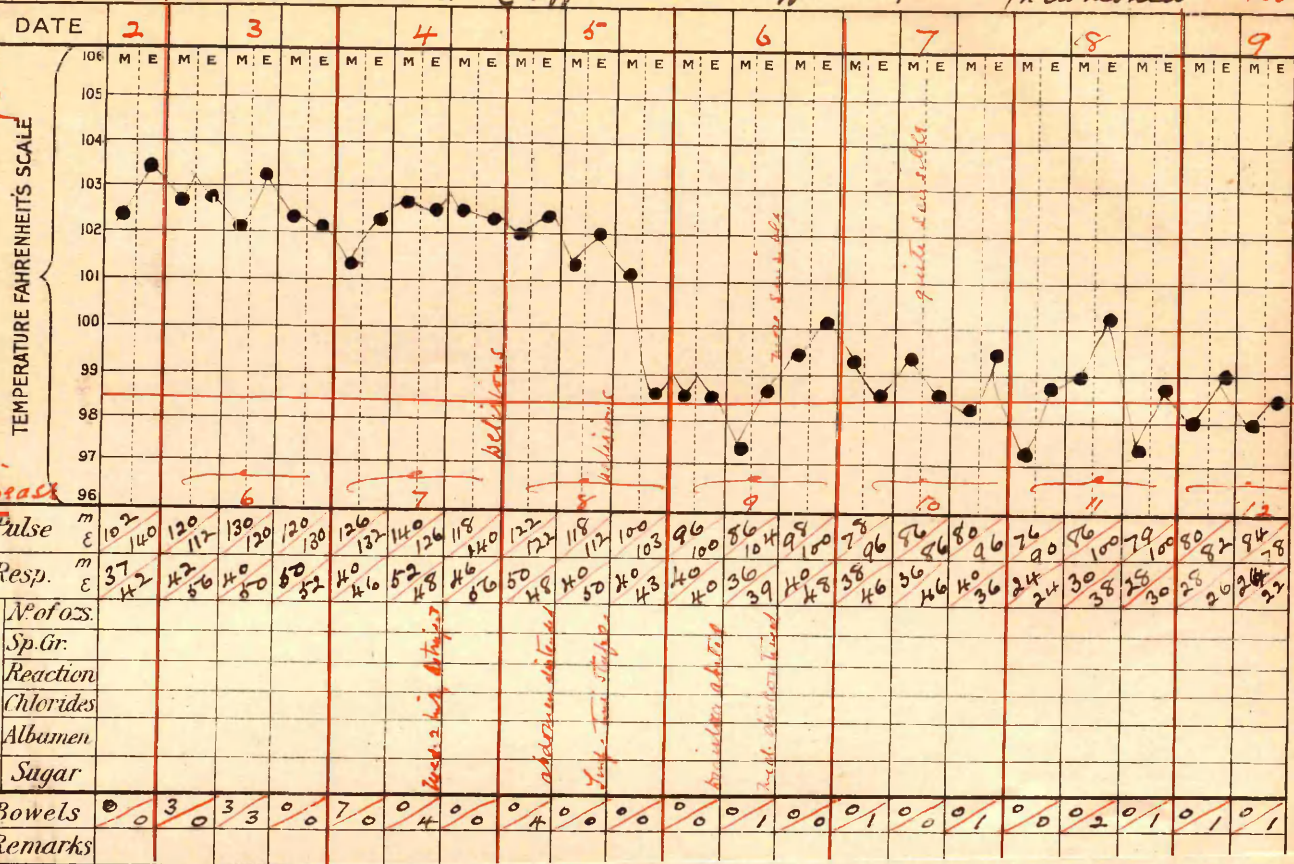
In Chart No 6 the temperature reached  $106^{\circ}$ . I have only met with a higher temperature once and that was in the case of Chart No 12 when just prior to death it reached  $107.4$ . In each of these cases delirium was a prominent feature and it was in those cases when nervous symptoms were prominent that those rises occurred before death. In Chart No 11 meningitis came on as a complication.

As in recovery all cases do not end by a sharp crisis so in death all cases do not terminate by a rapid ascent of the temperature. There were cases when the patient died from suffocation or from heart failure when the temperature remained practically steady up to the time of death. In some others a fall of a few degrees was noted.

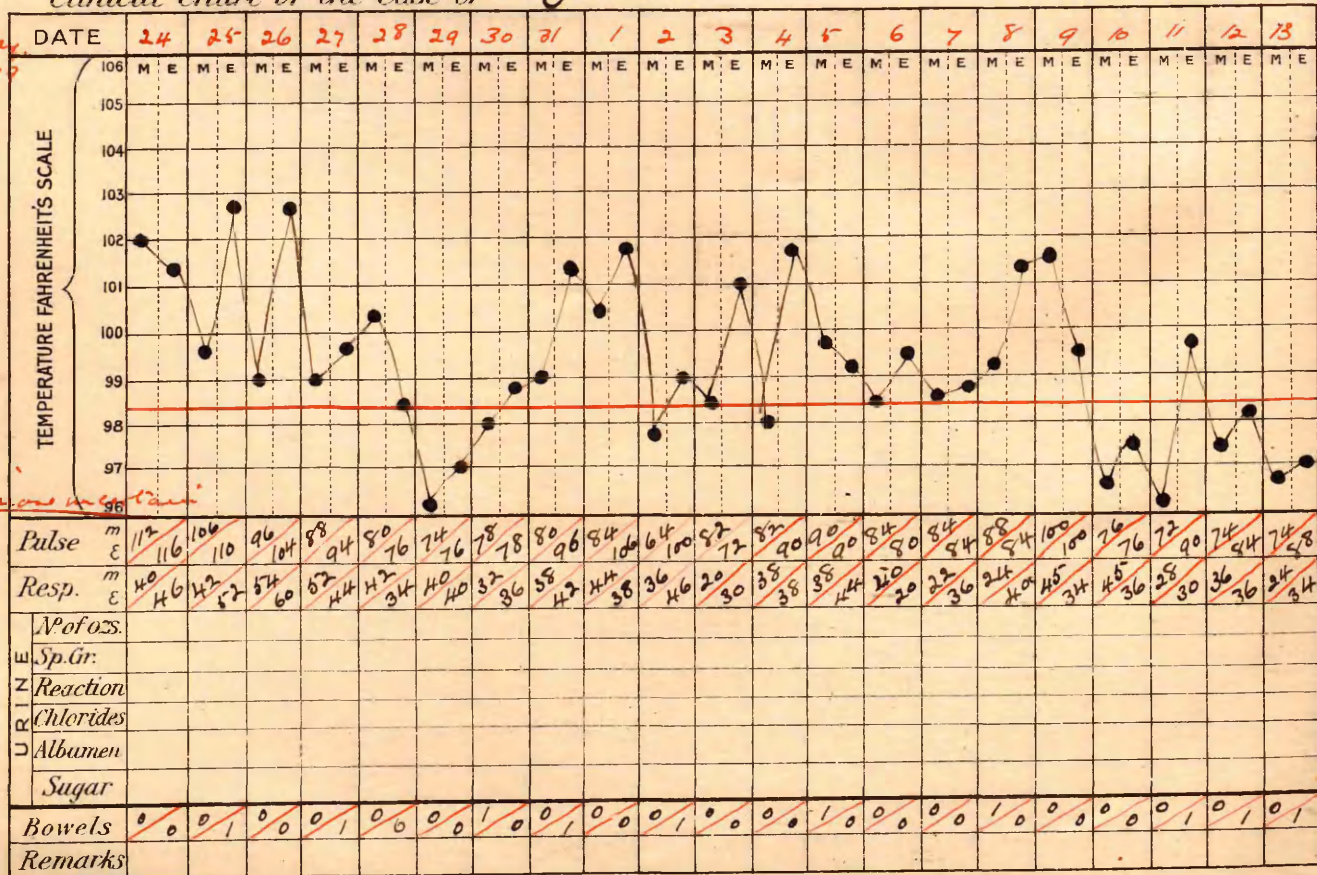




# Clinical Chart of the case of *Clifford Ratcliff* 27. *Pneumonia* No 13.



# Clinical Chart of the case of *John Hart* 62. *Pneumonia* No 14.



During the first two or three days of convalescence I have noted, in some cases there is a considerable rise of temperature. This is illustrated by chart No 13 when on three successive days following the crisis a rise of 1.00 was noted and after that the temperature kept normal. The same is shown in chart No 9. These evening rises were being continued over a longer period than three days did not in any way interfere with convalescence and were probably due to an excess of the normal daily variation brought about by the weakened condition of the patient.

This evening rise after convalescence has begun was a fairly common occurrence & is to be carefully distinguished from those cases where the chart shows the temperature running up into febrile regions and remaining there some days and then coming down to normal again by a crisis. This is shown to a certain extent in chart No 14 when the temperature had been normal for about forty eight hours and then it began to rise until it reached 102°. The next few days show much irregularity but it comes down at the end by a crisis. In this case which all along showed a very irregular chart there was a suspicion of phthisis and that might have accounted for the secondary elevation or what is quite as probable is that the secondary fever was due to a fresh extension of the inflammatory process.